

Current Glider Track and Location

04/04/2011 @ 1551Z

Glider Position Forecast

Waypoints

Current Waypoint (CW) 4/04/11

~1551Z

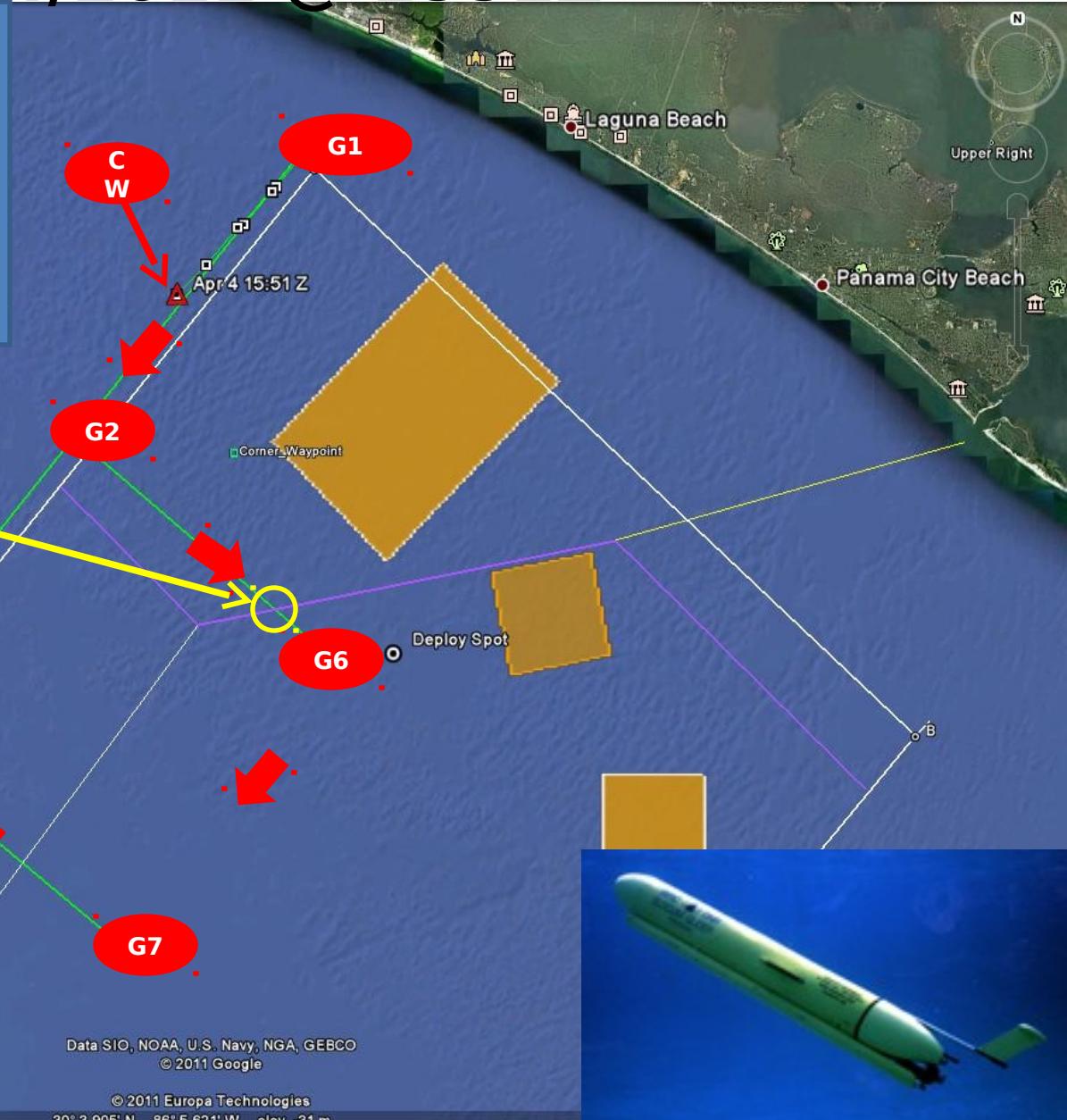
G6 4/05/11

G7 4/06/11

G3 4/07/11

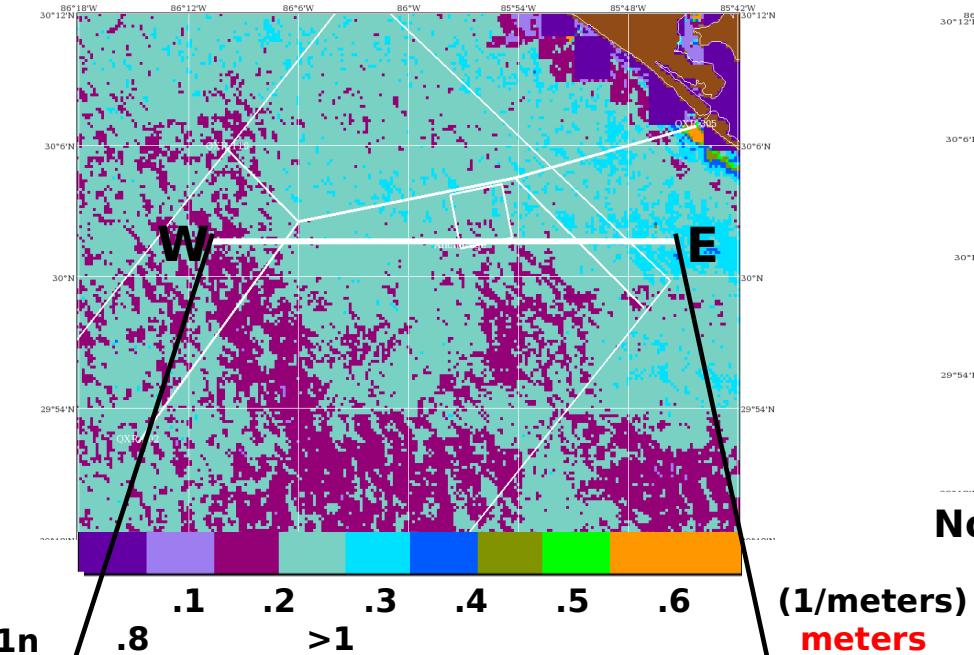
NOTE:

Glider is predicted to cross
Q-Route between G2 and G6
On 4/5/11 @ ~0400.

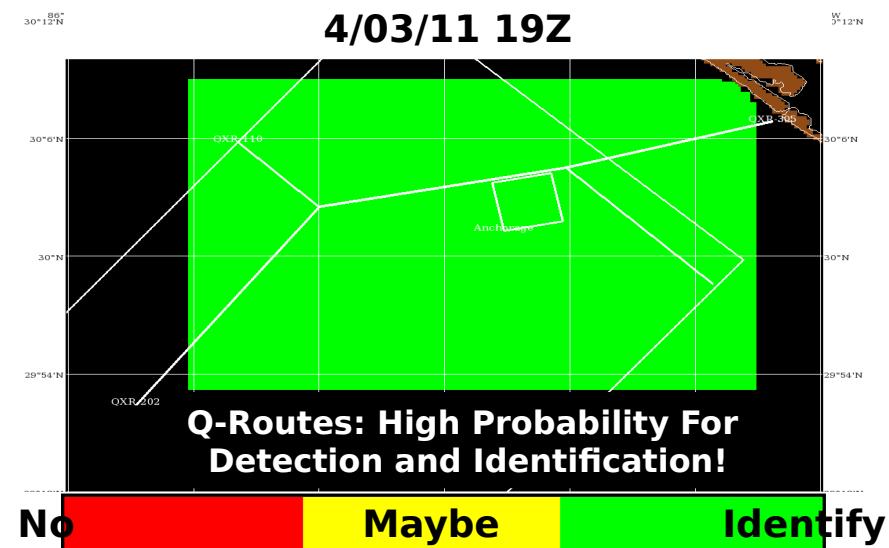


Nowcast AQS-24 Support for April 03, 2011 19Z

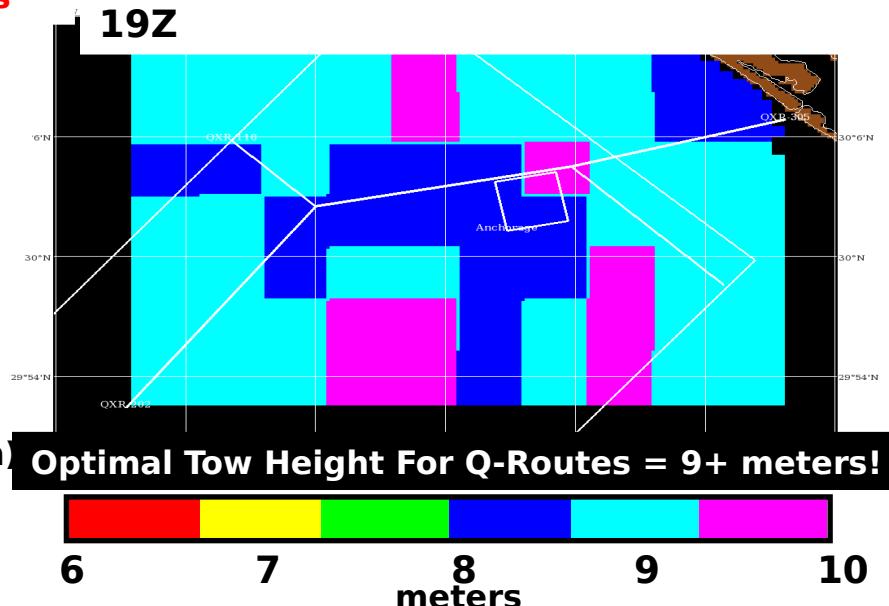
Surface Beam-c/Diver Visibility 4/03/11 19Z



Target Identification @ 6m Tow Altitude 4/03/11 19Z



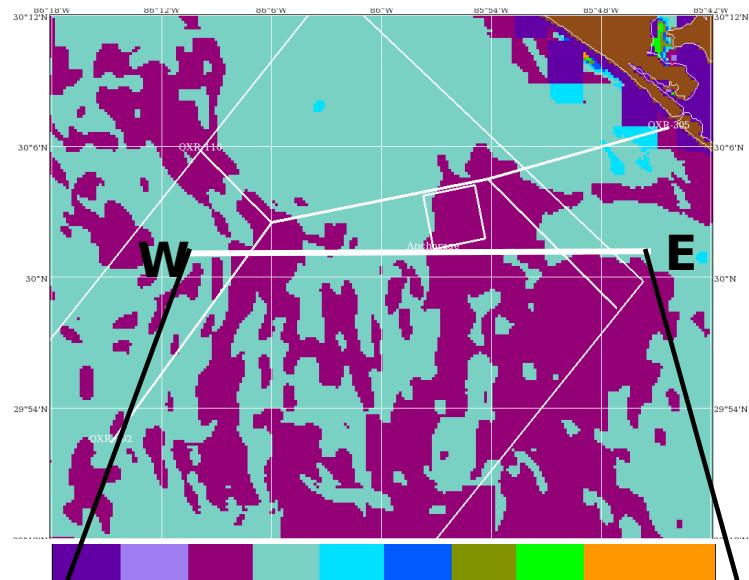
Optimal Tow Altitude - 4/03/11



24 Hour Forecast AOS-24 Support for April 04, 2011 19Z

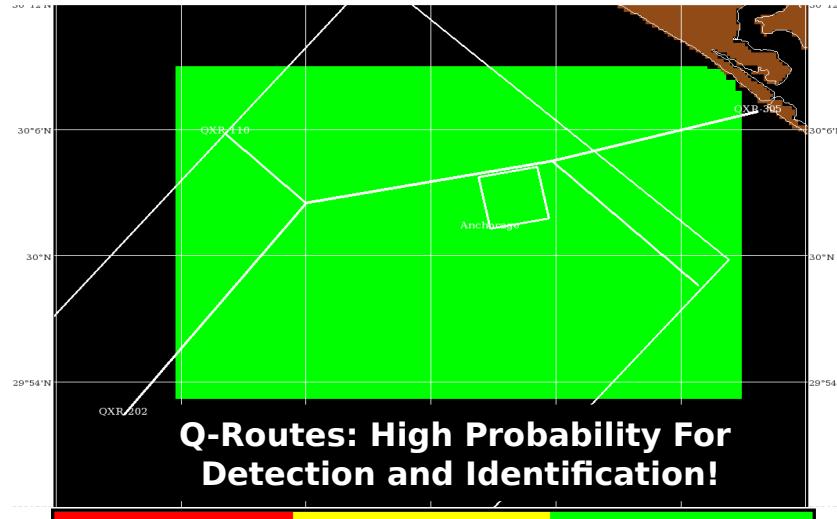
Surface Beam-c/DiverVis

4/04/11 19Z



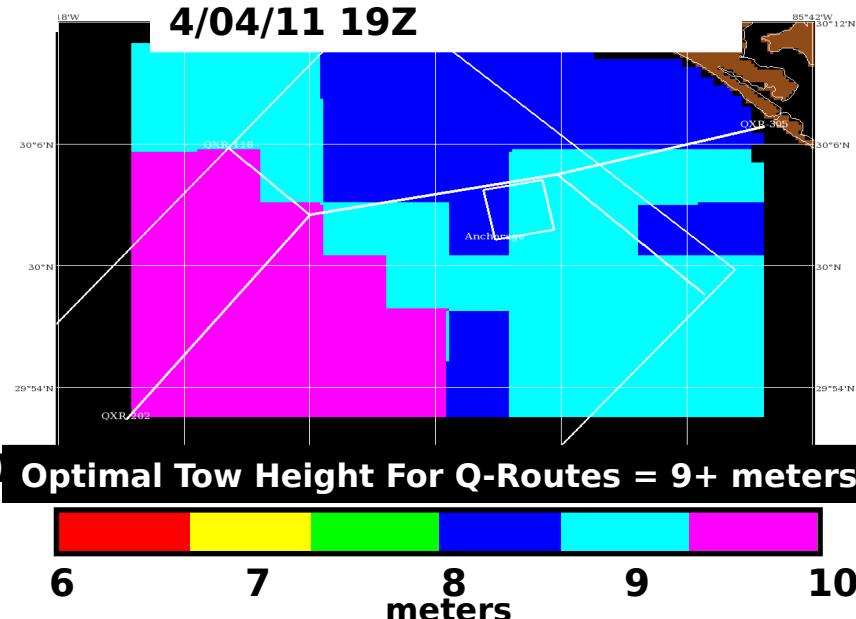
Target Identification @ 6m Tow Altitude

4/04/11 19Z



Optimal Tow Altitude

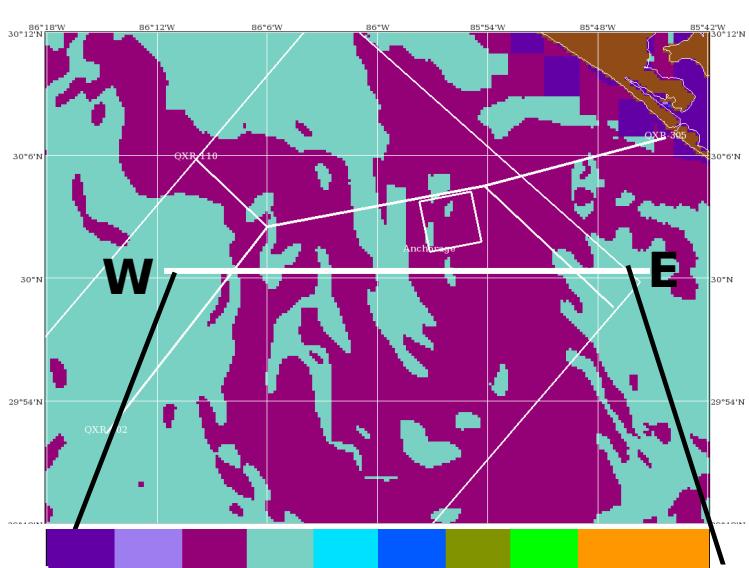
4/04/11 19Z



48 Hour Forecast AOS-24 Support for April 05, 2011 19Z

Surface Beam-c/DiverVis

4/05/11 19Z

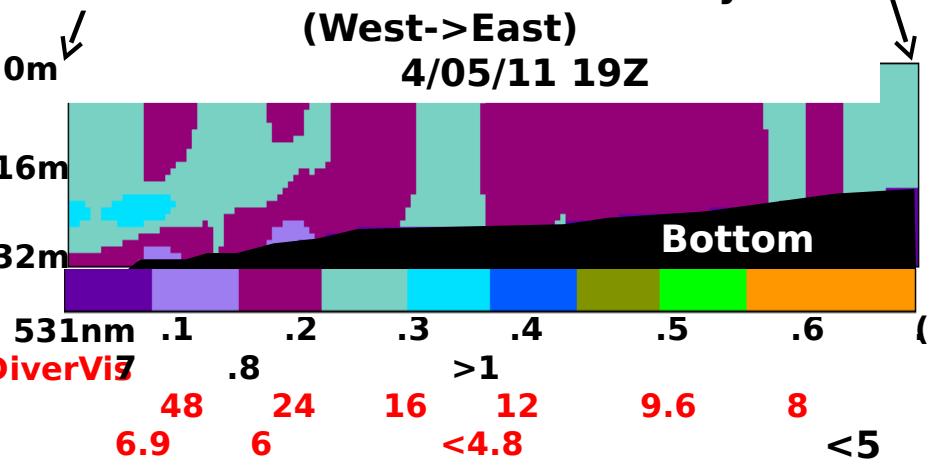


c
531n .8 .1 .2 .3 .4 .5 .6 (1/meters)
m
Diver
Vis
6 48 24 16 12 9.6 8 6.9
0m
16m
32m
531nm .1 .2 .3 .4 .5 .6 (1/m)
DiverVis 6.9 48 24 16 >1 12 9.6 8 <5

3D Beam-c/DiverVisibility Slice

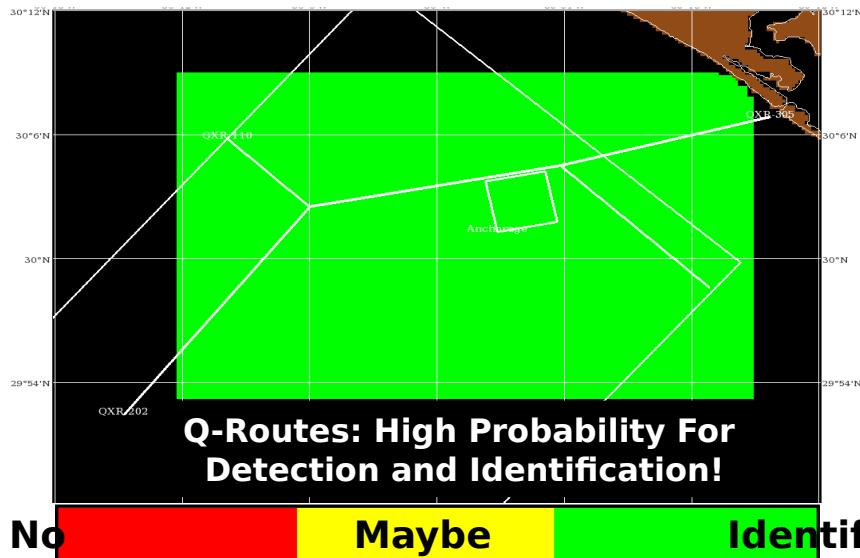
(West->East)

4/05/11 19Z

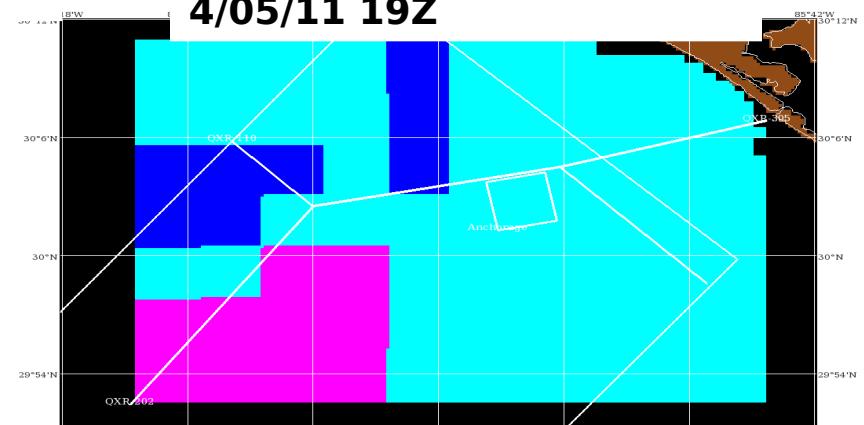


Target Identification @ 6m Tow Altitude

4/05/11 19Z



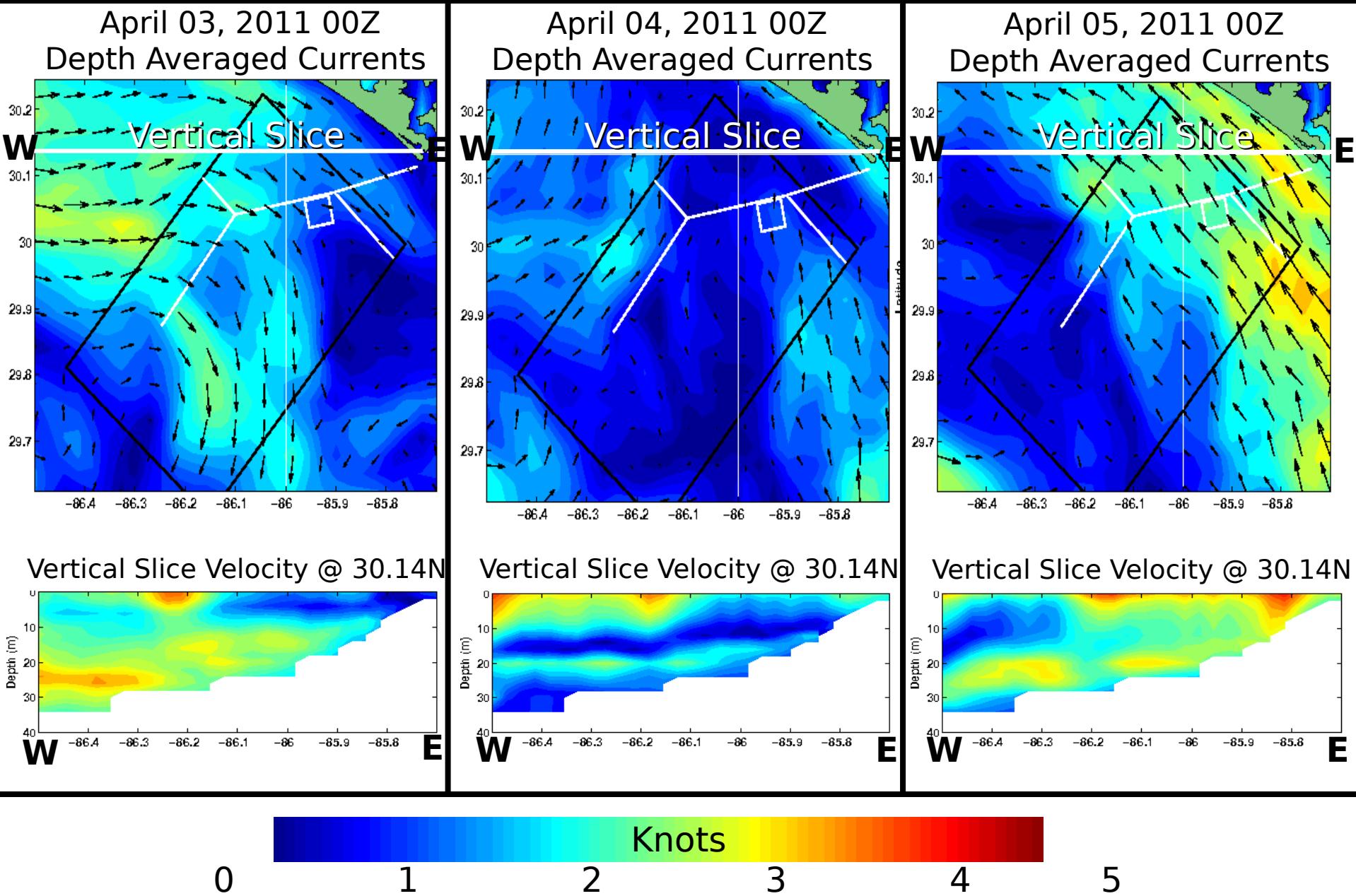
No
Maybe
Identify
Optimal Tow Altitude
4/05/11 19Z



Optimal Tow Height For Q-Routes = 9+ meters!

6 7 8 9 10
meters

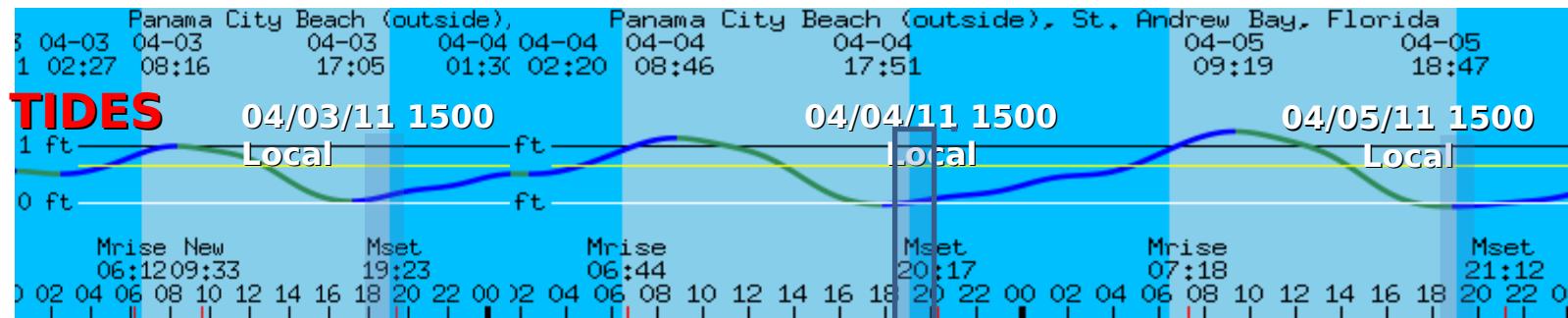
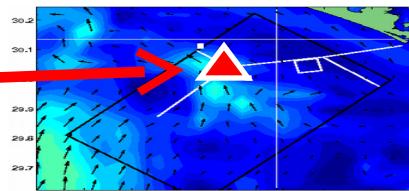
Physical Model Nowcast & Forecast – April 03, 2011



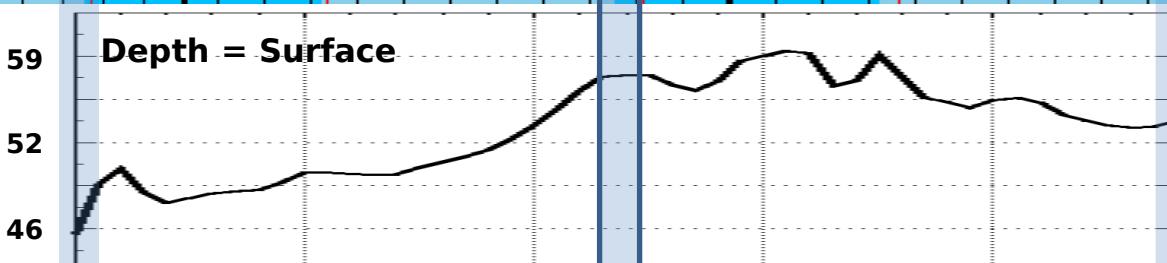
04/03/2011

TIME SERIES @ 30.05N, 86.1W

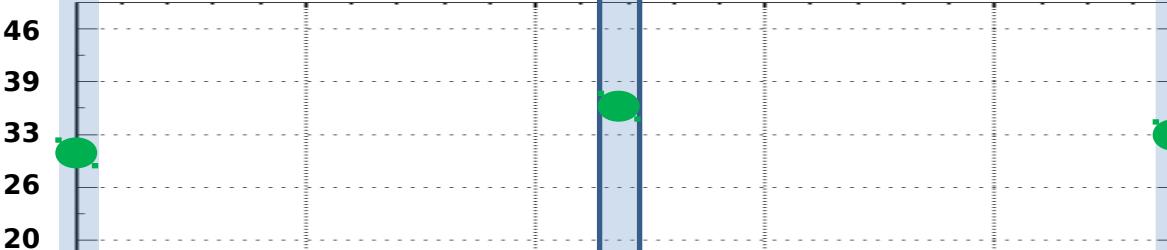
FORECAST OVER NEXT 48 HOURS



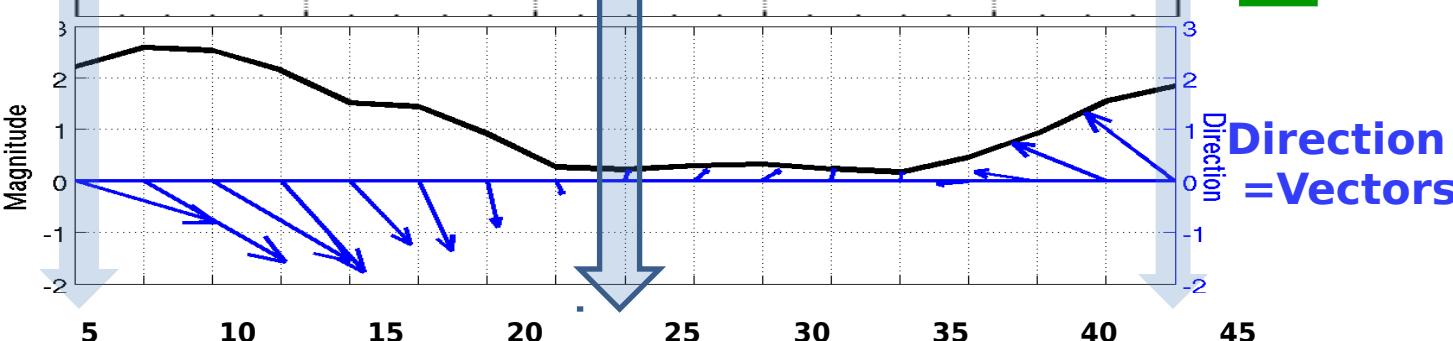
Horizontal Diver Visibility Forecast (Feet)



Optimal Tow Altitude (Feet)



Modeled Depth Averaged Currents (Knots) =Solid Line



No Target ID?
? Color Of Circle
Yes

Direction = Vectors

Summary

- 1. Surface and subsurface turbidity (beam-c) range from 0.3-0.5 m⁻¹ in op-area for today (04/03/11 19Z), tomorrow (04/04/11) and for 48 hour forecast (04/05/11 19Z). (See Slides 2,3,4)**
- 2. Surface and subsurface diver visibility (horizontal) range from 32-52 feet in op-area for today (04/01/11 19Z), tomorrow (04/02/11 19Z) and for 48 hour forecast (04/03/11 19Z). (See Slides 2,3,4)**
- 3. System Performance: Today (04/01/11 19Z), tomorrow (04/02/11 19Z) and 48 Hour Forecast (04/03/11 19Z) expect ID and Detection over 100% in Q-Routes.**
- 4. Today (04/01/11 19Z), tomorrow (04/02/11 19Z) and 48 hour forecast (04/03/11 19Z) predicted tow heights range from 29-36 feet in Q-Routes. (See Slides 2,3,4)**
- 5. Time Series at Surface for Location 30.05N and 86.1W: Horizontal Diver Visibility ranges from 46 to 59 feet during period starting 04/03/11 19Z to 4/5/11 19Z. Optimal Tow Height is ~30 feet during same 48 hour period yielding high probability of target ID. Surface currents during the same 48 hour period ranges from 0.2 to 2.8 knots.**

Note: Good satellite scenes collected on 3/25/11, 4/01/11 & 4/03/11.

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How are products being used?
Changes/Needs/Suggestions**